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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
ON APPEAL FROM THE EXAMINER TO THE BOARD  
OF PATENT APPEALS AND INTERFERENCES

In re Application of: Uwe Sydon, et al.

Serial No.: 09/884,415

Filed: June 18, 2001

Confirmation No. 3184

Group No.: 2631

Examiner: Jean B. Corrielus

Title: *Method and System for Power-Conserving Interference  
Avoidance in Communication between a Mobile Unit and a  
Base Unit in a Wireless Telecommunication System*

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Dear Sir:

**APPEAL BRIEF**

Appellants have appealed to this Board from the decision of the Examiner, contained in a Final Office Action mailed September 24, 2003 (the "Final Action"), finally rejecting Claims 13 and 16-33. Appellant mailed a Notice of Appeal on December 1, 2003. Appellants respectfully submit this Appeal Brief, in triplicate under 37 C.F.R. § 1.17(c).

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### **REAL PARTY IN INTEREST**

The real party in interest for this Application under appeal is Siemens Corporation of Iselin, New Jersey.

### **RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to the Appellants, the undersigned Attorney for Appellants, or the Assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### **STATUS OF CLAIMS**

Pursuant to the Final Office Action mailed September 24, 2003, all pending Claims 13 and 16-33 stand rejected. In particular, the Examiner maintains the rejection of Claims 13, 16-27, and 31-33 under 25 U.S.C. 112, first paragraph. Additionally, the Examiner maintains the rejection of Claims 28-30 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,249,683 to Lundby ("*Lundby*") in view of U.S. Patent No. 5,999,832 to Vannatta ("*Vannatta*"). Claims 13 and 16-33 were rejected in the Final Action. Claims 13 and 16-33 are all presented for appeal and are set forth in Appendix A.

Appellant hereby appeals the rejections of Claims 13 and 16-33.

### **STATUS OF AMENDMENTS**

Appellants filed no amendments after the Final Action.

### **SUMMARY OF INVENTION**

According to one embodiment of the present invention, a method for avoiding interference in a wireless telecommunication system is provided that includes providing communication between a first and second component at an initial frequency. Page 12 Line 16 to Page 13 Line 6. A plurality of successive line quality indicators is determined at a line quality monitor of the first component. Page 13, Lines 18-25. Consecutive line quality indicators are summed over a predetermined time to determine a slow hop count. Page 14, Lines 8-12 and Lines 16-20. A determination is made as to whether the slow hop count is greater than a slow hop threshold. Page 16, Line 17 to Page 17, Line 26. A determination is made as to whether to provide communication with the first component at a second frequency

when the slow hop count is greater than the slow hop threshold. *Id.* This determination is based on a power level of the second component and a communication strength received from the second component at the first component. *Id.* A signal is communicated from the first component to the second component requesting the second component to provide communication at the second frequency. *Id.*

### ISSUES

1. Did the Examiner err in concluding that Claims 13, 16-27 and 31-33 are unpatentable under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time of the application was filed, had possession of the claimed invention?

2. Did the Examiner err in concluding that Claims 28-30 are unpatentable under 35 U.S.C. § 103(a) due to obviousness under *Lundby* in view of *Vannatta*?

### GROUPING OF CLAIMS

Appellants have made an effort to group claims to reduce the burden on the Board. In the argument section of this brief, where appropriate, Appellants present arguments why particular claims subject to a ground of rejection are separately patentable from other claims subject to the same ground of rejection.

Appellants have concluded that the claims can be grouped together as follows:

1. Group 1 can include Claims 13, 16-27 and 31-33.
2. Group 2 can include Claims 28-30.

### ARGUMENT

I. Applicants had possession of the invention claimed in Claims 13, 16-27 and 31-33 at the time of filing the application.

The Examiner continues to reject Claims 13, 16-27 and 31-33 under 35 U.S.C. § 112, first paragraph, for allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Office Action, Page 2 and 4-5. Applicants submit that the Examiner has misunderstood how a slow hop counter indicates a lower signal quality, and based on this misunderstanding, the Examiner asserts that the rejected claims are inconsistent with the description. As clearly detailed below, the claims are completely consistent with, and fully supported by, the specification.

#### A. Group 1

The Examiner rejects Claim 13 asserting that the specification does not provide support for the following limitation: "transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level less than the first power level, when the initial quality is higher than a predetermined signal quality and the communication strength is greater than a specified range." Regarding this limitation, the Examiner specifically states that:

"The specification teaches, at best, at page 17, lines 14-26 the second power level at branch (332) less than the first power level, when the line quality for the initial signal in decision element 304 is **inferior** to a predetermined threshold (slow hop threshold) and the communication strength (RSSI) in decision box 330 is greater than a specified range (desired range)."

The Examiner bold-prints the word "inferior" to suggest that decisional step 304 of FIGURE 3 teaches the opposite of what is claimed in Claim 13. As mentioned above, the basis of this misunderstanding is that the Examiner does not understand that a slow hope counter has generally an inverse relationship to signal quality. Page 13, Lines 23-25; Page 14, Lines 16-20. For example, a lower slow hop counter indicates a higher or superior signal quality, as discussed in more detail below.

To begin with, a slow hope counter is obtained from line quality indicators. Page 13, Lines 26-28. The slow hop counter, in one embodiment, is "a continuing summation of consecutive line quality indicators from corresponding line quality monitors 198 and 209 over a pre-determined amount of time." Page 14, Lines 16-20. As disclosed in this application, "a higher value for a line quality indicator corresponds to a lower quality signal." Page 13, Lines 23-35. As a result, a sum of line quality indicators, i.e., a slow hop counter in one embodiment, higher than a slow hop threshold, i.e., a predetermined signal quality, indicates the signal quality is lower than a predetermined signal quality. In this case, the transmitting component may want to increase transmitting power or change its transmitting

frequency to increase the line quality or lower the slow hop counter. FIGURE 3, decisional steps 306 and 308. In summary, the yes branch of decisional step 304 generally indicates that if the initial signal quality is lower or inferior to a predetermined signal quality, the transmitting power may need to be increased or the transmitting frequency may need to be changed to increase the signal quality above the predetermined or desired signal quality. *Id.*

Conversely, a lower value for a line quality indicator corresponds to a higher quality signal. Page 13, Lines 23-35. As a result, a sum of line quality indicators, i.e., a slow hop counter in one embodiment, lower than a slow hop threshold, i.e., a predetermined signal quality, indicates the signal quality is higher or superior than a predetermined or desired signal quality. In this case, the transmitting component may reduce its transmitting power, which increases the slow hop counter, to conserve transmitting power while maintaining the signal quality above a desired signal quality. FIGURE 3, decisional step 330. In summary, the No branch of decisional step 304 generally indicates that if the initial signal quality is higher or superior to a predetermined signal quality, the transmitting power may be reduced to conserve transmitting power. The rejection is therefore improper and should be reversed.

Claims 26 and 31 are allowable for analogous reasons. Claims 16-20, which depend from independent Claim 13, are allowable for the reasons mentioned above. Claim 27, which depends from Claim 26, is allowable for the reasons mentioned above. Claims 32-33 depends from Claim 31 and is allowable for the reasons mentioned above.

The Examiner rejects Claim 19 asserting that the specification does not provide support for the following limitation: "at maximum power when the line quality is lower than the predetermined signal quality threshold and the first power level is not maximum." Regarding this limitation, the Examiner specifically states that:

"The specification teaches at best at page 16, lines 17-21, the first component is requested to transmit at maximum power when the line quality for the initial signal quality in decision element 304 is **superior** to the predetermined threshold (slow hop threshold) and the first power is non maximum in decision 306.

The Examiner bold-prints the word "superior" to suggest that decisional step 304 of FIGURE 3 teaches the opposite of what is claimed in Claim 13. As mentioned above, the basis of this misunderstanding is that the Examiner has misunderstood that a slow hop counter has generally an inverse relationship to signal quality. For example, a higher slow hop counter indicates a lower or inferior signal quality, as discussed above.

As discussed in great detail above, a slow hop counter greater than a slow hop threshold indicates that the signal quality is less or inferior than a desired signal quality. A slow hop counter, in one embodiment, is "a continuing summation of consecutive line quality indicators from corresponding line quality monitors 198 and 209 over a pre-determined amount of time." Page 14, Lines 16-20. As disclosed in this application, "a higher value for a line quality indicator corresponds to a lower quality signal." Page 13, Lines 23-35. As a result, a sum of line quality indicators, i.e., slow hop counter in one embodiment, greater than a slow hop threshold, i.e., a desired signal quality, indicates that the signal quality is lower than a desired signal quality. In this case, the method in FIGURE 3 will request maximum power output from the transmitting component to increase the signal quality, resulting in a lower slow hop counter.

Claims 21 and 32 are allowable for analogous reasons. Claims 20 that depends from Claim 19 is allowable for the reasons mentioned above. Claims 22-27 depend from Claim 21 and are allowable for the reasons mentioned above. Claim 33 depends from Claim 32 and is allowable for the reasons mentioned above.

## **II. Group 2: Claims 28-30 are allowable**

### **A. Overview**

Claims 28-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lundby* in view of *Vannatta*. Appellant respectfully disagrees. First, the combination would still fail to disclose, teach, or suggest the limitations of Claims 28-30. Second, the proposed combination of *Lundby* and *Vannatta* is improper.

### **B. Standard for Rejections under 35 U.S.C. § 103**

A claimed invention is unpatentable if the differences between it and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a); *Graham v. John Deere Co.*, 148 USPQ 459, 465 (1966). The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of

nonobviousness. *Graham v. John Deere*, 148 USPQ at 467; *Miles Labs., Inc. v. Shandon Inc.*, 27 USPQ.2d 1123, 1128 (Fed. Cir. 1993).

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation . . . to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." *In re Vaeck*, 947 F.2d 488, 20 USPQ.2d 1438 (Fed. Cir. 1991). MPEP § 2142.

**C. *Lundby* and *Vannatta* Fails to Disclose, Teach or Suggest All the Limitations of Claims 28-30.**

It is elementary that to support an obviousness rejection, all of the claim limitations must be taught or suggested by the prior art applied. *In re Royka*, 490 F.2d 981, 984-85 (C.C.P.A. 1974). Even assuming that one skilled in the art would have been led to combine the teachings of *Lundby* with the teachings of *Vannatta*, the combination would fail to disclose, teach or suggest all of the limitations of Claims 28-30.

For example, independent Claim 28 recites, "determining a line quality for **the initial signal** at the second component by summing **consecutive** line quality indicators over **a pre-determined period of time**." For the teaching of this limitation, the Examiner offers the summing of SNRs associated with a plurality of different data streams,<sup>1</sup> but this passage fails to teach the above limitation. Each SNR in the offered sum of *Lundby* is associated with a respective data stream. *Id.* The sum is not a sum of consecutive line quality indicators of a signal over time, but rather a sum of the single line quality for all of a plurality of data streams, as described below.

*Lundby* discloses that the data streams may be transmitted using either code division multiple access (CDMA) or time division multiple access (TDMA). Col. 9, Lines 34-48. In the case of CDMA, the data streams, as is well known in the art, are multiplexed and simultaneously transmitted, so the SNRs associated with each data stream are simultaneous SNRs, not consecutive. In the case of TDMA, each channel, as is well known in the art, is divided into three slots such that three data streams may share a channel, so this technique contemplates that slots of each channel will be transmitted simultaneously with slots of other

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<sup>1</sup> Col. 10, Lines 2-8.

channels. As a result, the offered sum of SNR will be a sum of three sets of simultaneous SNRs, not a sum of consecutive SNRs.

The purpose of the summation of *Lundby* is to combine signal quality information from a plurality of different signals, not to obtain an indication over time of the quality of a single signal. Thus, *Lundby* has no reason to sum consecutive line qualities over time and therefore does not teach this limitation.

For at least these reasons, Appellant respectfully submits that the proposed combination of *Lundby* and *Vannatta* fails to disclose, teach or suggest all the limitations of Claims 28-30. Thus, even assuming that *Lundby* and *Vannatta* could be combined as proposed by the Examiner (which they cannot, as discussed above), the rejection of Claims 28-30 under 35 U.S.C. § 103 over *Lundby* in view of *Vannatta* is improper. Therefore, Claims 28-30 are allowable.

**D. The Combination of *Lundby* and *Vannatta* is Improper**

Appellant respectfully submits that the rejection of Claim 28-30 is improper at least because there is no showing of the required motivation to combine *Lundby* with *Vannatta* to disclose, teach, or suggest the limitations recited in Claims 28-30.

According to the Examiner in the Final Office Action mailed September 24, 2003, *Lundby* discloses all of the limitations of Claims 28-30 with the exception of "the second power level based on the quality and power level of the first (initial) signal." Final Office Action, page 4. The Examiner looks to *Vannatta* for disclosure of these limitations. The Examiner states that "It would have been obvious to one skill[ed] in the art at the time of the invention to select the subsequent power level based on signal level and power level of the first signal so as to increase the efficiency and the life of the battery source and operating time of mobile station as taught by *Vannatta*." Final Office Action, page 4.

However, in order to modify a reference in an effort to produce the claimed invention, there must be some suggestion or motivation for such modification found in the reference itself or in the knowledge generally available to one of ordinary skill in the art at the time of the invention. M.P.E.P. § 2143.01. Further, in establishing a *prima facie* case of obviousness, it is incumbent upon the Examiner to provide evidence supporting why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference

teachings to arrive at the claimed invention. *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). The mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990); M.P.E.P. § 2143.01.

Here, the Examiner has not cited any language in *Lundby* or *Vannatta* or within information commonly known to those skilled in the art that provides the necessary motivation or suggestion to combine the references. Rather, the Examiner merely asserts that the combination would have been obvious “to increase the efficiency and the life of the battery source and operating time of mobile station as taught by *Vannatta*.” Final Office Action, page 4. However, no where does *Lundby* disclose, teach, or suggest a need for “increasing the efficiency and the life of the battery source and operating time.” In fact, *Lundby* teaches transmitting a single stream of power control commands from mobile station 100a to multiple base stations (i.e., BS1, BS2, BS3,... BS<sub>n</sub>) to adjust the signal-to-noise ratio (SNR) of signals received at the mobile station 100a. Col. 10, Lines 2-20. Nothing in *Lundby* motivates or suggests the need for increasing the battery efficiency of a mobile station by monitoring signal information, such as power level and line quality, received at a base station and transmitted by a mobile stations, as allegedly disclosed by *Vannatta*. In addition, *Vannatta* merely teaches managing the transmitting power of a mobile station 102 based on the availability of a secondary power source. Col. 3, Lines 63-65. Nothing in *Vannatta* motivates or suggests the use of the battery monitoring system with any other use, much less for the use of providing a single power control command to adjust the SNR of data streams from multiple base stations. Thus, the suggestion or motivation required by M.P.E.P. § 2143.01 for the proposed combination of *Lundby* and *Vannatta* does not exist, and the Examiner has failed to identify the source of such suggestion or motivation.

Furthermore, in failing to specifically identify specific teachings in the cited references that would suggest or motivate one of skill in the art at the time of invention to combine *Lundby* and *Vannatta*, the Examiner has used hindsight to look at the system claimed in Claims 28-30 and then conclude that it would be obvious to combine the SNR management system of *Lundby* with the teachings of *Vannatta*. Measuring a claimed invention against the standard established by Section 103 requires the difficult but critical step of casting the mind back to the time of invention, to consider the thinking of one of

ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See, e.g., *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1983).

In *In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999), the Federal Circuit explained that evidence of a suggestion, teaching, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight. *Id.* at 999 (emphasis added).

It is for this reason that the Examiner must specifically identify the reasons one of ordinary skill in the art would have been motivated to select the references and combine them. The Examiner can satisfy the burden of obviousness in light of a combination “only by showing some objective teaching [leading to the combination].” See, e.g., *In re Fine*, 5 USPQ.2d 1596, 1600 (Fed. Cir. 1988). Although evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, the range of sources available does not diminish the requirement for actual evidence. Broad conclusory statements by the Examiner regarding the teaching of multiple references, standing alone, are not “evidence.” *In re Dembiczak*, 175 F.3d at 999. Here, the broad conclusory statement of the Examiner that the combination would have been obvious “to select the subsequent power level based on signal level and power level of the first signal so as to increase the efficiency and the life of the battery source and operating time of mobile station as taught by Vannatta” is not “evidence.” Appellant respectfully submits that the Examiner has not provided the required evidence of a suggestion, teaching, or motivation to combine *Lundby* with *Vannatta*. Without this evidence, the Examiner's rejections amount to no more than the impermissible hindsight reconstruction of Appellant's invention.

Furthermore, modifying *Lundby* as suggested by the Examiner would change the principle of operation of the SNR monitoring system disclose in *Lundby* and render key

features useless or inoperable. If a “proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” M.P.E.P. §2143.01. The principle of operation of the SNR monitoring system in *Lundby* is to manage the SNR of multiple data streams transmitted by multiple base stations with a single control command transmitted by a single mobile station 100a,<sup>2</sup> not increasing “the efficiency and the life of the main battery source and operating time of mobile station 102.” *Vannatta*, Col. 5, Lines 57-59. The design, construction, and use of the SNR monitoring system as disclosed in *Lundby* that could be used with the battery management system disclosed in *Vannatta* would require a substantial reconstruction and redesign of the elements in *Lundby*. The mobile station 100a disclosed in *Lundby* would have to be redesigned to perform a battery monitoring system disclosed in *Vannatta*. Therefore, for at least these reasons, amended Claims 28-30 are allowable. Accordingly, Applicants respectfully request that the rejection of Claims 28-30 be reversed.

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<sup>2</sup> *Lundby*, Col. 10, Lines 2-20.

### CONCLUSION

Appellant respectfully submits that the present invention as claimed is distinguishable over the cited art. Therefore, Appellant respectfully requests the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a Notice of Allowance of all pending claims.

Appellants submit this Appeal Brief in triplicate. Please charge the fee of \$ 330.00 under 37 CFR 1.17 (b) to Deposit Account No. 19-2179 for filing this brief in support of the appeal. It is believed that no additional fees are due in connection with this paper; however, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Deposit Account No. 19-2179 of Siemens Information & Communications Products, L.L.C.

Date: Jan. 29, 2004

Respectfully requested,

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APPENDIX A

Claims:

1-12 (Withdrawn)

13. (Previously presented) A method for conserving power in a wireless communication system, comprising:

providing communication between a first and second component;

transmitting an initial signal from the first component to the second component at a first power level;

receiving the initial signal from the first component at the second component;

determining an initial signal quality at the second component;

determining a communication strength for the initial signal at the second component; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level less than the first power level, when the initial signal quality is higher than a pre-determined signal quality and the communication strength is greater than a specified range.

14-15 (Withdrawn)

16. (Original) The method of Claim 13, the first component comprising a mobile unit and the second component comprising a base unit.

17. (Original) The method of Claim 13, the first component comprising a base unit and the second component comprising a mobile unit.

18. (Previously presented) The method of Claim 13, determining an initial signal quality comprising determining a plurality of successive line quality indicators and summing consecutive line quality indicators over a pre-determined period of time.

19. (Previously presented) The method of Claim 13, further comprising:

determining a power level for the initial signal at the second component, the power level comprising one of a maximum power level and at least one non-maximum power level; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the maximum power level when the initial signal quality is lower than the pre-determined signal quality and the first power level is a non-maximum power level.

20. (Previously presented) The method of Claim 19, further comprising:

incrementing an attempt counter at the second component when a request is transmitted for the first component to transmit a subsequent signal at the maximum power level; and

determining a power level for the initial signal comprising determining a value of the attempt counter.

21. (Previously presented) A system for conserving power in a wireless communication system, comprising:

a first component;

a second component for providing wireless communication with the first component and for transmitting an initial signal to the first component at a first power level;

an error detector for the first component, the error detector for determining a line quality for the initial signal; and

the first component operable to determine a power level for the initial signal, the power level comprising one of a maximum power level and at least one non-maximum power level and to transmit a signal to the second component requesting the second component to transmit a subsequent signal at the maximum power level when the initial signal quality is lower than a pre-determined signal quality and the first power level is a non-maximum power level.

22. (Previously presented) The system of Claim 21, the first component comprising a mobile unit and the second component comprising a base unit.

23. (Previously presented) The system of Claim 21, the first component comprising a base unit and the second component comprising a mobile unit.

24. (Previously presented) The system of Claim 21, the error detector operable to determine an initial signal quality by determining a plurality of successive line quality indicators.

25. (Previously presented) The system of Claim 24, further comprising a slow hop counter for summing consecutive line quality indicators over a pre-determined period of time, the error detector further operable to determine an initial signal quality by determining a value of the slow hop counter.

26. (Previously presented ) The system of Claim 21, the first component further operable to determine a communication strength for the initial signal and to transmit a signal to the second component requesting the second component to transmit a subsequent signal at a second power level, the second power level less than the first power level, when the initial signal quality is higher than the pre-determined signal quality and the communication strength is greater than a specified range.

27. (Previously presented) The system of Claim 21, further comprising:  
an attempt counter for the first component, the attempt counter for indicating whether the second component is transmitting at the maximum power level; and  
the first component operable to determine a power level for the initial signal by determining a value of the attempt counter.

28. (Previously presented) A method for conserving power in a wireless communication system, comprising:

- providing communication between a first and second component;
- receiving an initial signal from the first component at the second component, the initial signal transmitted from the first component at a first power level;
- determining a plurality of successive line quality indicators for the initial signal at the second component;
- determining a line quality for the initial signal at the second component by summing consecutive line quality indicators over a pre-determined period of time; and
- transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level based on the line quality for the initial signal.

29. (Previously presented) The method of Claim 28, the first component comprising a mobile unit and the second component comprising a base unit.

30. (Previously presented) The method of Claim 28, the first component comprising a base unit the second component comprising a mobile unit.

31. (Previously presented) The method of Claim 28, further comprising:

- determining a communication strength for the initial signal at the second component; and
- transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the second power level, the second power level less than the first power level, when the initial signal quality is higher than a pre-determined signal quality and the communication strength is greater than a specified range.

32. (Previously presented) The method of Claim 28, further comprising:

determining a power level for the initial signal at the second component, the power level comprising one of a maximum power level and at least one non-maximum power level; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the second power level, the second power level comprising the maximum power level, when the initial signal quality is less than a pre-determined signal quality line quality for the initial signal is inferior to a pre-determined threshold and the first power level is a non-maximum power level.

33. (Previously presented) The method of Claim 32, further comprising:

incrementing an attempt counter at the second component when a request is transmitted for the first component to transmit a subsequent signal at the maximum power level; and

determining a power level for the initial signal comprising determining a value of the attempt counter.



## CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

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SignatureVicki Chia  
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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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P.O. Box 1450  
Alexandria, VA 22313-1450

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TRANSMITTAL FOR APPEAL BRIEF

Sir:

Transmitted herewith, in triplicate, is the APPEAL BRIEF appealing the decision of the Examiner of the Final Office Action mailed September 24, 2003.

Please charge the required fee for filing and Appeal Brief of \$330.00 to the Siemens Deposit Account No. 19-2179. Please charge any additional fees or credit any over payment to our Deposit Account. A duplicate copy of this sheet is enclosed.

Date: Jan. 29, 2004

Respectfully requested,

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